



Ni-Fe-Cr Filler Metal

INCONEL® Filler Metal 718

INCONEL Filler Metal 718 is used for gas-tungsten-arc welding of INCONEL alloys 718, 706 and X-750. The weld metal is age hardenable and has mechanical properties comparable to those of the base metals.

Specifications

AWS A5.14 ERNiFeCr-2 (UNS N07718)

ASME II, Part C, SFA-5.14, ERNiFeCr-2 (UNS N07718)

*BS2901 NA 51

*DIN 1736 SG-NiCr19NbMoTi (2.4667)

*(EN) ISO 18274 - SNI7718 (NiFe19Cr19Nb5Mo3)

*Supply to these specifications available upon request

For manufacture to ASME III (NCA3800, NB2400), Rolls Royce, AMS and other specifications please refer your inquiry to the Technical Department prior to order placement.

Approvals

Please confirm details of current scope of approvals with the Technical Department prior to order placement.

Limiting Chemical Composition

Ni 50.0-55.0
C 0.08 max.
Mn 0.35 max.
Fe Remainder
S 0.015 max.
Si 0.35 max.
Cu 0.30 max.
Cr 17.0-21.0

Al 0.20-0.80
Ti 0.65-1.15
Nb+Ta 4.75-5.50
Mo 2.80-3.30
P 0.015 max.
B 0.006 max.
Co 1.0 max.

Minimum Mechanical Properties

Tensile Strength, psi 165,000
MPa 1138

(Age hardened condition: 1325°F (720°C)/8 hours, Furnace Cool 100°F (55°C)/hour to 1150°F (620°C)/8 hours, Air Cool)

Filler metals available on spool and in cut straight lengths in a variety of sizes selected from the following diameters:

Available Product Forms

mm in	0.8 0.030	0.9 0.035	1.0 0.040	1.14 0.045	1.2 0.047	1.6 0.062	2.4 0.093	3.2 0.125
----------	--------------	--------------	--------------	---------------	--------------	--------------	--------------	--------------

Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)